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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,987	03/15/2004	James A. Scudder	ONT-101	1407
23410	7590	06/14/2005		
COHEN SAKAGUCHI & ENGLISH LLP 2040 MAIN STREET, 9TH FLOOR IRVINE, CA 92614				
			EXAMINER DOERRLER, WILLIAM CHARLES	
			ART UNIT 3744	PAPER NUMBER

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/800,987

Applicant(s)

SCUDDER ET AL.

Examiner

William C. Doerrler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-25 is/are rejected.
- 7) ☒ Claim(s) 5 and 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In both of the claims, it is unclear how between 10 and 20% of particles filter through a #20 mesh, yet less than 3% of particles filter through a #20 mesh. It appears from the claims that less than 3 is between 10 and 20.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-9, 16, 17 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Scudder et al '164.

Scudder et al '164 shows a self heating/cooling container with a central reactant chamber surrounded by a material chamber. Lines 42-60 of column 8 describe how a pull-off section is removed prior to activating the thermic module. Lines 25-30 of column 8 describe the heat exchanger portion. Calcium oxide and water are given as reactants

in lines 14-26 of column 11. Figure 8 shows the barrier 234 extending to the thermic module cap and forming a radiused edge.

Claims 1-3,7-9,16,17 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Scudder et al '078.

Scudder et al '078 shows a self heating/cooling container with a central reactant chamber surrounded by a material chamber. Lines 42-60 of column 8 describe how a pull-off section is removed prior to activating the thermic module. Lines 25-30 of column 8 describe the heat exchanger portion. Calcium oxide and water are given as reactants in lines 14-26 of column 11. Figure 8 shows the barrier 234 extending to the thermic module cap and forming a radiused edge.

Claims 1-3,7-9,16,17 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Scudder et al '786.

Scudder et al '786 shows a self heating/cooling container with a central reactant chamber surrounded by a material chamber. Lines 42-60 of column 8 describe how a pull-off section is removed prior to activating the thermic module. Lines 25-30 of column 8 describe the heat exchanger portion. Calcium oxide and water are given as reactants in lines 14-26 of column 11. Figure 8 shows the barrier 234 extending to the thermic module cap and forming a radiused edge.

Claims 1-3,7-9,16,21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Scudder et al '022.

Scudder et al '022 shows a self heating/cooling container with a central reactant chamber surrounded by a material chamber. Lines 49-61 of column 4 describe how a

pull-off section is removed prior to activating the thermic module. Pleated wall 244 is seen as the heat exchanger portion. Figure 8 shows the barrier 234 extending to the thermic module cap and forming a radiused edge.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4,10-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Any of the above Scudder et al references ('164, 078, 786, '022). Each of the above Scudder et al references disclose applicants' basic inventive concept, a self heating/cooling container with a pull-off cover to prevent accidental activation of the thermic member, substantially as claimed with the exception of

specifying the size of the reactants and the specific ratio used. These are all seen as matters of obvious design choice for an ordinary practitioner in the art. In regard to claim 4, the pleated wall 244 of each of the references most likely has radii of greater than .05 inches. Nonetheless, one of ordinary skill in the art would recognize that changing the diameter will change the surface area which affect heat transfer.

Weighing the benefits of increased heat transfer with the detraction of loss of product volume would have been obvious to one of ordinary skill in the art to maximize performance of the device. In regard to claim 10, changing the straight grooves of the earlier references to helical is seen as an obvious matter of design choice which will not appreciably effect the functioning of the device. In regard to the size of calcium oxide used, one of ordinary skill in the art would know that smaller particles increase surface area, thus increasing reaction rate, as well as recognize that if the particles are too small, they might escape out the disclosed vents. As such, the size of the particles used is seen as a matter of obvious design choice for an ordinary practitioner in the art weighing the rate of heat generation, due to reaction rate, while maintaining the reactants in place. The same is true of the ratios claimed in claims 13 and 20. It is noted that applicants' specification states that a 1 to 4 ratio is common. It is further noted that 1 to 4 can be interpreted as "about 1.15" to 4 as claimed.

Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Any of the above Scudder et al references (164, 078, 786, '022) in view of Joseph et al.

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Each of the Scudder et al references disclose applicants' basic inventive concept, a heating/cooling container with a removable cover to prevent accidental activation of the device, with the device being activated by the rupturing of a barrier between reactant chambers, substantially as claimed with the exception of using thermochromatic ink to notify a user of the temperature of the container during use. Joseph et al show this feature to be old in the self heating/cooling container art in line 43 of column 11. It would have been obvious to one of ordinary skill in the art at the time of applicants' invention from the teaching of Joseph et al to modify the heating/cooling container of any of the above Scudder et al references by using thermochromatic ink on the label to notify a user of the temperature to ensure the product is at the proper temperature for use and to avoid possible injury.

Allowable Subject Matter

Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Scudder et al '879 and '867 as well as Bell et al and Okamoto et al show containers which are heated/cooled by chemical reactions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Doerrler whose telephone number is (571) 272-4807. The examiner can normally be reached on Monday-Friday 6:30-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William C Doerrler
Primary Examiner
Art Unit 3744

WCD